the body, by including it in the globe, and then applying friction, &c. For though the effluvia of cinnamon, and the electrical fluid ſhould mix within the globe, they would never come out together through the pores of the glaſs, and ſo go to the prime conductor; for the electrical fluid itſelf cannot come through; and the prime conductor is always ſupply'd from the cuſhion, and that from the floor. And beſides, when the globe is filled with cinnamon, or other non-electric, no electrical fluid can be obtain'd from its outer ſurface, for the reaſon before-mentioned. I have try'd another way, which I thought more likely to obtain a mixture of the electrical and other effluvia together, if ſuch a mixture had been poſſible. I placed a glaſs plate under my cuſhion, to cut off the communication between the cuſhion and floor; then brought a ſmall chain from the cuſhion into a glaſs of oil of turpentine, and carried another chain from the oil of turpentine to the floor, taking care that the chain from the cuſhion to the glaſs touch'd no part of the frame of the machine. Another chain was fix'd to the prime conductor, and held in the hand of a perſon to be electriſed. The ends of the two chains in the glaſs were near an inch diſtant from each other, the oil of turpentine between. Now the globe being turn'd, could draw no fire from the floor through the machine, the communication that way being cut off by the thick glaſs plate under the cuſhion: it muſt then draw it through the chains whoſe ends were dipt in the oil of turpentine. And as the oil of turpentine being an electric *per ſe*, would not conduct what came up from the floor, was obliged to jump from the end of one chain, to the end of the other, through the ſubſtance of that oil, which we could ſee in large ſparks; and ſo it had a fair opportunity of ſeizing ſome of the fineſt particles of the oil in its paſſage, and carrying them off with it: but no ſuch effect followed, nor could I perceive the leaſt difference in the ſmell of the electrical effluvia thus collected, from what it has when collected otherwiſe; nor does it otherwiſe affect the body of a perſon electriſed. I likewiſe put into a phial, inſtead of water, a ſtrong purgative liquid, and then charged the phial, and took repeated ſhocks from it, in which caſe every particle of the electrical fluid muſt, before it went through my body, have firſt gone through the liquid when the phial is charging, and returned through it when diſcharging, yet no other effect followed than if it had been charged with water. I have alſo ſmelt the electrical fire when drawn through gold, ſilver, copper, lead, iron, wood, and the human body, and could perceive no difference; the odour is always the ſame where the ſpark does not burn what it ſtrikes; and therefore I imagine it does not take that ſmell from any quality of the bodies it paſſes through. And indeed, as that ſmell ſo readily leaves the electrical matter, and adheres to the knuckle receiving the ſparks, and to other things;

BENJAMIN FRANKLIN *Experiments and Observations on Electricity* LONDON, 1751 THE WARNOCK LIBRARY Octavo